DEFENSE INFORMATION SYSTEMS AGENCY
JOINT INTEROPERABILITY TEST COMMAND
P.O. BOX 12798
FORT HUACHUCA, ARIZONA 85670-2798

IN REPLY
REFER TO: Battlespace Communications Portfolio (JTE)   21 December 2007

MEMORANDUM FOR DISTRIBUTION

SUBJECT: Special Interoperability Test Certification for T-METRICS, INC., TM-2000 Multi-Purpose Automatic Call Distribution (ACD) Platform Version Load 15 Oct 04 with the Specified Nortel Networks Digital Switching Systems

References: (a) DoD Directive 4630.5, "Interoperability and Supportability of Information Technology (IT) and National Security Systems (NSS)," 5 May 2004
(b) CJCSI 6212.01D, "Interoperability and Supportability of Information Technology and National Security Systems," 8 March 2006

1. References (a) and (b) establish the Defense Information Systems Agency, Joint Interoperability Test Command (JITC), as the responsible organization for interoperability test certification. Additional references are provided in enclosure 1.

2. The T-METRICS, INC., TM-2000 Multi-Purpose ACD Platform with Version Load 15 Oct 04, hereinafter referred to as the system under test (SUT) meets its sole interface requirement and all required functional capabilities. Based on the original certification and review of the vendor letters of compliance, JITC has determined that this system meets all the critical interoperability certification requirements for an ACD as set forth in reference (c) for joint use within the Defense Switched Network (DSN), specifically with the Nortel Networks Meridian Switching Load (MSL)-100 Digital Switching System. The Communication Server (CS) 2100 Digital Switching System employs the same software and trunk/line card hardware as the MSL-100. Analysis by JITC determined that the CS2100 is functionally identical to the MSL-100 for interoperability certification purposes, and the SUT is also certified with the CS2100. The SUT is interoperable with the following MSL-100 proprietary Meridian Business Set (MBS) interfaces: M5008, M5216, and M5316. The SUT soft phone that emulates the Nortel Networks MBS used by the ACD agents was also tested and is covered under this certification. No other configurations, features, or functions, except those cited within this report, are certified or authorized for use within the DSN. This certification expires upon changes that affect interoperability, but no later than three years from the date of this memorandum.

3. This is a certification based on a desktop review of the SUT. The original certification was granted based on interoperability testing by JITC and review of the vendors Letters of Compliance (LoC). Interoperability testing was conducted at the Global Information Grid Network Test Facility, Fort Huachuca, Arizona, from 20 through 22 October 2004 and documented in reference (e). Review of vendor's LoC was completed on 20 November 2004.

JITC Memo, JTE, Special Interoperability Test Certification of the T-METRICS, INC., TM-2000 Multi-Purpose Automatic Call Distribution (ACD) Platform Version Load 15 Oct 04 with the Specified Nortel Networks Digital Switching Systems

A desktop review of the SUT was conducted on 15 November 2007 to determine if the SUT required additional testing. Due to the SUT not having software or firmware changes and the DSN interfaces not significantly changing, JITC concluded that further interoperability testing was not required and the SUT is certified again. Review of the CS2100 was conducted on 16 November 2007 to determine if the SUT required additional testing. Due to the CS2100 having the same hardware, software, and interfaces, JITC conclude further interoperability testing was not required and the SUT is also certified with the CS2100. The Certification Testing Summary (enclosure 2) documents the test results and describes the test network.

4. The Functional Requirements used to evaluate the interoperability of the SUT and the interoperability statuses are indicated in table 1.

Table 1. SUT Functional Requirements and Interoperability Status

Interfaces	Critical	Certified	Functional Requirements	Status	GSCR Paragraph
2-Wire MSL-100 Proprietary Interface: Emulates M5008, M5216, and M5316 MBS	No[1]	Yes	MLPP in accordance with GSCR, Section 3 (C)	Met	A7.5
			FCC Part 15/Part 68 (R)	Met	A7.5
			Auto answer ring interval (C)	Not Tested	A7.5
			MLPP Precedence call alerting (C)	Met	A7.5
			DTMF outpulsing (C)	Not Tested	A7.5, 5.4.1, 5.4.2
			JTA compliance as applicable (R)	Met	A7.5
			Network Management (C)	Not Tested	A7.5
			TIA/EIA-470-B (C)	Not Tested	A7.5.2
			Security (R)	See note 2.	A7.6.5

LEGEND:
BRI   - Basic Rate Interface
C   - Conditional
DISA   - Defense Information Systems Agency
DISR   - Department of Defense Information Technology Standards Registry
DTMF   - Dual Tone Multi-Frequency
EIA   - Electronic Industries Alliance
FCC   - Federal Communications Commission
GSCR   - Generic Switching Center Requirements
ISDN   - Integrated Services Digital Network
JTA   - Joint Technical Architecture (replaced by the DISR)

M   - Meridian
MBS   - Meridian Business Sets
MLPP   - Multi-Level Precedence and Preemption
MSL   - Meridian Switching Load
PCM-24   - Pulse Code Modulation - 24 Channels
PCM-30   - Pulse Code Modulation - 30 Channels
R   - Required
SUT   - System Under Test
TIA   - Telecommunications Industry Association

NOTES:
1   The Automatic Call Distribution requirements can be met via one of the following interfaces: 2-Wire Analog, 2- or 4-Wire Digital Proprietary, ISDN BRI, PCM-24, or PCM-30.
2   Information Assurance testing is accomplished via DISA-led Information Assurance test teams and published in a separate report.

5. JITC distributes interoperability information via the JITC Electronic Report Distribution (ERD) system, which uses Unclassified-But-Sensitive Internet Protocol Router Network (NIPRNet) e-mail. More comprehensive interoperability status information is available via the JITC System Tracking Program (STP). The STP is accessible by .mil/.gov users on the NIPRNet at https://stp.fhu.disa.mil. Test reports, lessons learned, and related testing documents and references are on the JITC Joint Interoperability Tool (JIT) at http://jit.fhu.disa.mil (NIPRNet), or http://199.208.204.125 (SIPRNet). Information related to DSN testing is on the Telecom Switched Services Interoperability (TSSI) website at http://jitc.fhu.disa.mil/tssi.

JITC Memo, JTE, Special Interoperability Test Certification of the T-METRICS, INC., TM-2000 Multi-Purpose Automatic Call Distribution (ACD) Platform Version Load 15 Oct 04 with the Specified Nortel Networks Digital Switching Systems

6. The JITC point of contact is Mr. Steven Lesneski, DSN 879-5400, commercial (520) 538-5400, FAX DSN 879-4347, or e-mail to Steven.Lesneski@.disa.mil. The tracking number for the SUT is 42261.

FOR THE COMMANDER:

2 Enclosures a/s   RICHARD A. MEADOR
                                                        Chief
                                                        Battlespace Communications Portfolio

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ADDITIONAL REFERENCES

(c)   Defense Information Systems Agency, "Department of Defense Voice Networks Generic Switching Center Requirements (GSCR), Errata Change 2," 14 December 2006, Revised 27 March 2007

(d)   Joint Interoperability Test Command, "Defense Switched Network Generic Switch Test Plan (GSTP), Change 2," 2 October 2006

(e)   Joint Interoperability Test Command, Memo, JTE, "Special Interoperability Test Certification of the T-METRICS, INC., TM-2000 Multi-Purpose Automatic Call Distribution (ACD) Platform Version Load 15 Oct 04 with the Nortel Networks MSL-100 Digital Switching System," 29 December 2004

CERTIFICATION TESTING SUMMARY

1. SYSTEM TITLE. Special Interoperability Test Certification for T-METRICS, INC., TM-2000 Multi-Purpose Automatic Call Distribution (ACD) Platform Version Load 15 Oct 04 with the Specified Nortel Networks Digital Switching Systems, hereinafter referred to as the System Under Test (SUT).
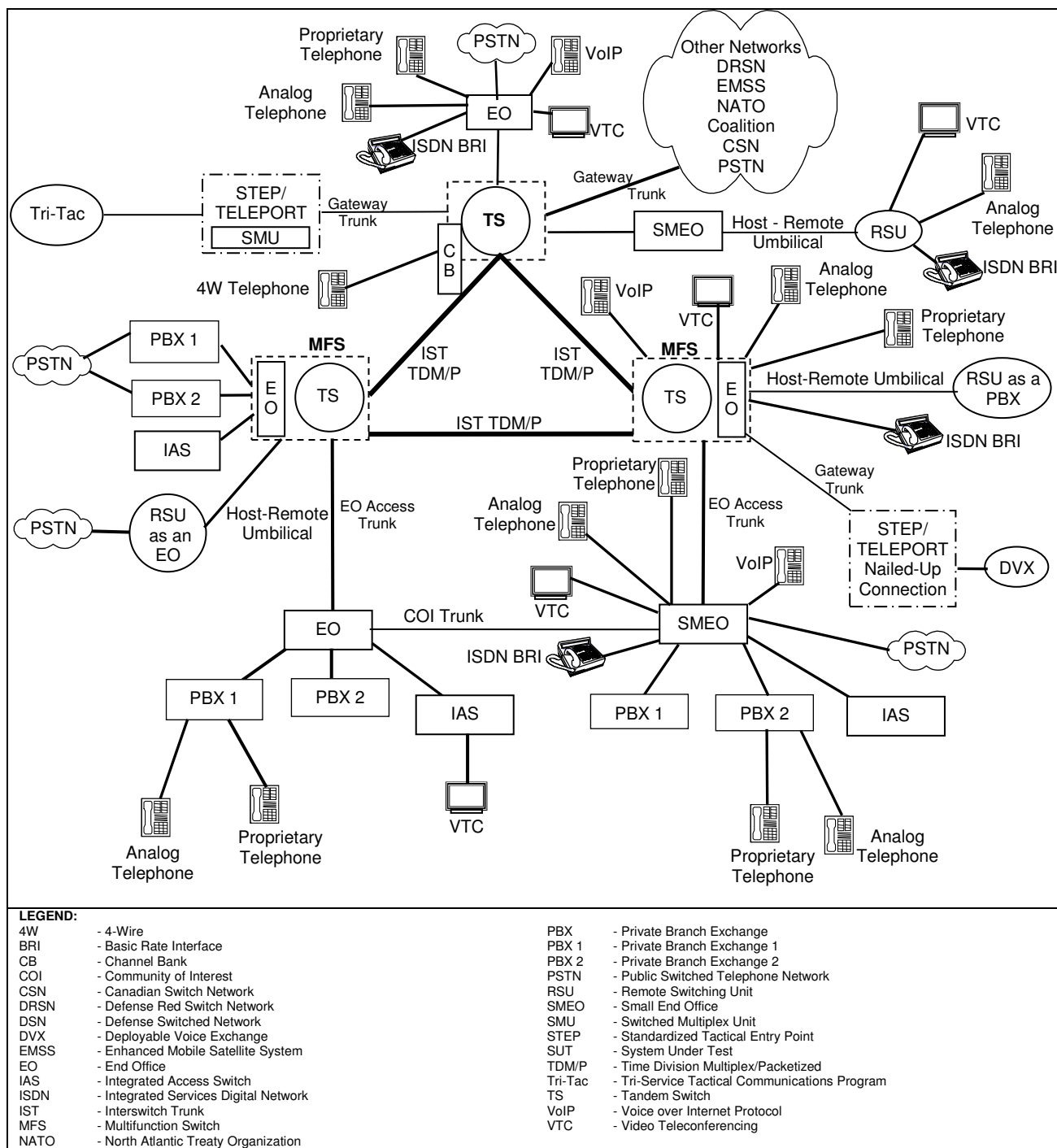
2. PROPONENT. Air Force Space Command (AFSPC CSS).

3. PROGRAM MANAGER. Msgt Rodolfo Rodriguez, A6NIS, 150 Vandenberg Street, Suite 1105, Peterson Air Force Base, Colorado 80914-4730, e-mail: rodolfo.rodriquez.3@us.af.mi.

4. TESTER. Joint Interoperability Test Command (JITC), Fort Huachuca, Arizona.

5. SYSTEM UNDER TEST DESCRIPTION. The SUT provides Interactive Voice Response, ACD, and other call completion functions for the Department of Defense and many large organizations in the commercial world. Some of the functions that the SUT provides are: Customer Relationship Management, database lookups (the platform can look up information about a caller and read back that information to the caller), morale-call server, hearts-apart call server, point and click Hypertext Markup Language-based call log reports, real-time status of functions being performed by the platform and agents servicing calls with the platform. An ACD system processes incoming telephone calls on a first-come, first-serve basis. The system typically answers each call immediately and, if necessary, holds it in queue until it can be directed to the next available ACD call center agent. When an agent becomes available, the agent serves the first caller in this queue. Based on test results and review of the vendor's Letters of Compliance (LoC), JITC has determined that this system meets all the interface and functional interoperability certification requirements for an ACD as set forth in the GSCR specifically with the Nortel Networks Meridian Switching Load (MSL)-100. JITC analysis determined the SUT is also certified with the Nortel Communication Server (CS)2100. The SUT is interoperable with the following MSL-100 proprietary Meridian Business Set (MBS) interfaces: M5008, M5216, and M5316. The SUT soft phone used by the ACD agents that emulates the Nortel Networks M5008, M5216 and M5316 MBS was also tested and is covered under this certification.

6. OPERATIONAL ARCHITECTURE. The Generic Switching Center Requirements (GSCR) DSN architecture in figure 2-1 depicts the relationship of the SUT to the DSN switches.

Figure 2-1. DSN Architecture

LEGEND:

|			
4W	- 4-Wire	PBX	- Private Branch Exchange
BRI	- Basic Rate Interface	PBX 1	- Private Branch Exchange 1
CB	- Channel Bank	PBX 2	- Private Branch Exchange 2
COI	- Community of Interest	PSTN	- Public Switched Telephone Network
CSN	- Canadian Switch Network	RSU	- Remote Switching Unit
DRSN	- Defense Red Switch Network	SMEO	- Small End Office
DSN	- Defense Switched Network	SMU	- Switched Multiplex Unit
DVX	- Deployable Voice Exchange	STEP	- Standardized Tactical Entry Point
EMSS	- Enhanced Mobile Satellite System	SUT	- System Under Test
EO	- End Office	TDM/P	- Time Division Multiplex/Packetized
IAS	- Integrated Access Switch	Tri-Tac	- Tri-Service Tactical Communications Program
ISDN	- Integrated Services Digital Network	TS	- Tandem Switch
IST	- Interswitch Trunk	VoIP	- Voice over Internet Protocol
MFS	- Multifunction Switch	VTC	- Video Teleconferencing
NATO	- North Atlantic Treaty Organization		

7.   REQUIRED SYSTEM INTERFACES. Requirements specific to the SUT and interoperability results are listed in table 2-1. These requirements are derived from the

GSCR Interface and Functional Requirements and were verified through JITC testing. The specific SUT applications certified on each interface are depicted in table 2-1.

Table 2-1. SUT Functional Requirements and Interoperability Status

Interfaces	Critical	Certified	Functional Requirements	Status	GSCR Paragraph
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			FCC Part 15/Part 68 (R)	Met	A7.5
			Auto answer ring interval (C)	Not Tested	A7.5
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			DTMF outpulsing (C)	Not Tested	A7.5, 5.4.1, 5.4.2
			JTA compliance as applicable (R)	Met	A7.5
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			TIA/EIA-470-B (C)	Not Tested	A7.5.2
			Security (R)	See note 2.	A7.6.5

LEGEND:			
BRI	- Basic Rate Interface	M	- Meridian
C	- Conditional	MBS	- Meridian Business Sets
DISA	- Defense Information Systems Agency	MLPP	- Multi-Level Precedence and Preemption
DISR	- Department of Defense Information Technology Standards Registry	MSL	- Meridian Switching Load
DTMF	- Dual Tone Multi-Frequency	PCM-24	- Pulse Code Modulation - 24 Channels
EIA	- Electronic Industries Alliance	PCM-30	- Pulse Code Modulation - 30 Channels
FCC	- Federal Communications Commission	R	- Required
GSCR	- Generic Switching Center Requirements	SUT	- System Under Test
ISDN	- Integrated Services Digital Network	TIA	- Telecommunications Industry Association
JTA	- Joint Technical Architecture (replaced by the DISR)		

NOTES:
1   The Automatic Call Distribution requirements can be met via one of the following interfaces: 2-Wire Analog, 2- or 4-Wire Digital Proprietary, ISDN BRI, PCM-24, or PCM-30.
2   Information Assurance testing is accomplished via DISA-led Information Assurance test teams and published in a separate report.

8. TEST NETWORK DESCRIPTION. The SUT was tested at JITC's Global Information Grid Network Test Facility in a manner and configuration similar to that of the DSN operational environment. Testing the system's required functions and features was conducted using the test configurations depicted in figure 2-2.
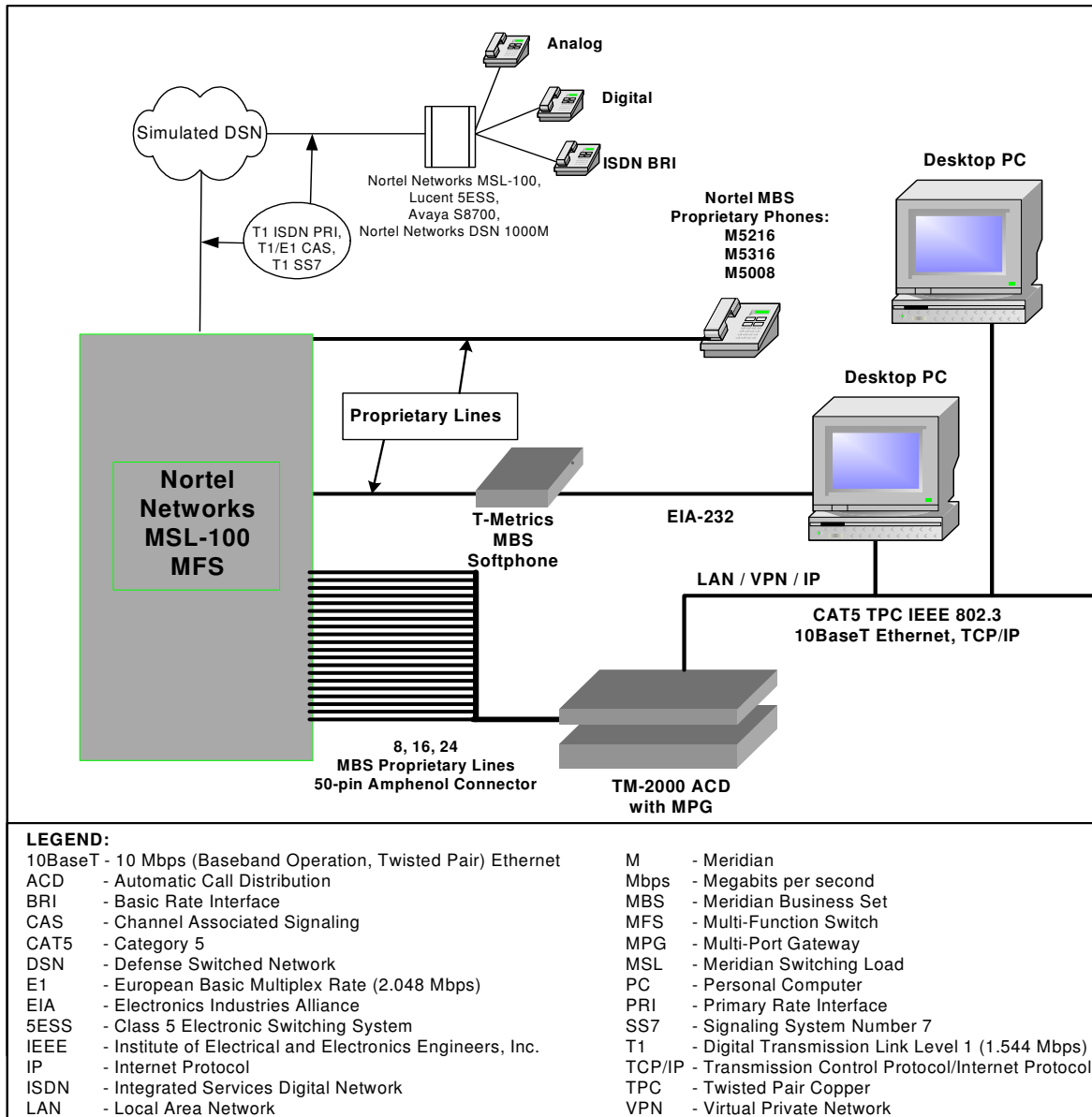
Figure 2-2. Test Configuration

9. SYSTEM CONFIGURATIONS. Table 2-2 provides the system configurations, hardware and software components tested with the SUT. The SUT was tested in an operationally realistic environment to determine interoperability with a complement of DSN switches noted in table 2-2. The DSN switches listed in table 2-2 only depict the tested configuration. Table 2-2 is not intended to identify the only switches that are certified with the SUT. The SUT is certified with switching systems listed on the DSN Approved Products List (APL) that offer the same certified interfaces. Table 2-3 provides the Nortel Networks MSL-100 service order database configurations used to test the SUT. Table 2-4 provides the SUT ACD key assignments.

Table 2-2. SUT Tested Configurations

System Name	Hardware/Software Release	
Siemens EWSD	19d with Patch Set 43	
Nortel Networks MSL-100 (See note.)	Succession Enterprise (SE)06	
Nortel Networks DSN 1000M	Succession 3.0	
Avaya S8700	Communication Manager (CM) 2.01 (R012x.00.1.221.1)	
Lucent 5ESS	5E16.2 Software Update 9	
	Subcomponents		**Subcomponent Software/ Firmware**
SUT Version Load 15 Oct 4	PC	**Motherboard:** SuperMicro P4 800MHz, On-Board Video and Dual Gigabit LAN	N/A
		Processor: INTP430E1M800, Pentium 4 3.0GHz HT w/800 FSB	N/A
		Memory: KIN512DDR400, Kingston 400MHz 256MB	N/A
		Hard Drives: MXT6Y080L0, Maxtor 80GB ATA133 7200 RAID 1 Configuration	N/A
		RAID Controller: 3WR75004, 3Ware Escalade 7500-4 4-Port ATA 133 RAID	N/A
		Sound Card: CLISBLIVEV51, Sound Blaster Live Dolby 5.1	N/A
		CD-ROM: NUTDCR521BLK, 52X Black	N/A
		PCI Riser Card: AICRC2PCITX3S1, 2U Riser w/1-64 bit slot & 1-32 bit slot	N/A
	TMI ACD Controller Module		VL 12 Oct 04
	TMI Event Server Module		VL 24 Sep 04
	TMI DigiFone Module		VL 15 Oct 04
	TMI Media Player		VL 24 May 04
	TMI ACD Agent Module		VL 12 Oct 04
	TMI ACD Utility Module		VL 31 Aug 04
	MBS Module		VL 15 Oct 04
	MBS-Soft phone		FW 3.24
	Multi-Port Gateway:	Control Board	FW 0022
		Stream Board	FW 00A3

LEGEND:

2U	- Two Units		
5ESS	- Class 5 Electronic Switching System	MB	- Megabyte
ACD	- Automatic Call Distribution	MBS	- Meridian Business Set
ATA	- Advanced Technology second generation	MHz	- Megahertz
CD-ROM	- Compact Disc – Read Only Memory	MSL	- Meridian Switching Load
CS	- Communication Server	N/A	- Not Applicable
DSN	- Defense Switched Network	P4	- Pentium 4
EWSD	- Elektronisches Wählsystem Digital	PC	- Personal Computer
FW	- Firmware	PCI	- Peripheral Component Interconnect
GB	- Gigabyte	RAID	- Redundant Array of Inexpensive Disks
GHz	- GigaHertz	SUT	- System Under Test
JITC	- Joint Interoperability Test Command	TMI	- T-Metrics Inc.
LAN	- Local Area Network	VL	- Version Load

NOTE: The SUT was tested with the MSL-100 with software release SE06. However, JITC analysis determined the SUT is interoperable with all MSL-100 and CS2100 software releases on the DSN Approved Products List.

Table 2-3. MSL-100 Service Order Configurations

```
--------------------------------------------------------------------------------
LEN:    HOST  00 1 00 16
TYPE: PILOT OF DNH HUNT GROUP
SNPA: 600
HUNT GROUP: 8     HUNT MEMBER: 0
DIRECTORY NUMBER:    6666221
LINE CLASS CODE:  M5316 SET
CUSTGRP:         MFS6 SUBGRP: 0  NCOS: 2  RING: Y
CARDCODE: 6X21AC   GND: N  PADGRP: NPDGP  BNV: NL MNO: Y
PM NODE NUMBER    :   50
PM TERMINAL NUMBER :   17
OPTIONS:
AVT PREMTBL
CXR CTALL N RLS

  KEY     DN
  ---    --
   1    DN       6006666221

  KEY    FEATURE
  ---   -------
   2     CXR  CTALL N  RLS
GROUP OPTIONS:
RCVD
MEMBER INFO:
  2    6006666222
  2    6006666223
  2    6006666224
  2    6006666225
  2    6006666226
  2    6006666227
  2    6006666228
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
LEN:    HOST  00 1 00 17
TYPE: MEMBER OF DNH HUNT GROUP
SNPA: 600
HUNT GROUP: 8     HUNT MEMBER: 1
DIRECTORY NUMBER:    6666222
LINE CLASS CODE:  M5316 SET
CUSTGRP:         MFS6  SUBGRP: 0  NCOS: 2  RING: Y
CARDCODE: 6X21AC   GND: N  PADGRP: NPDGP  BNV: NL MNO: Y
PM NODE NUMBER    :   50
PM TERMINAL NUMBER :   18
OPTIONS:
AVT PREMTBL
CXR CTALL N RLS

  KEY     DN
  ---    --
   1    DN       6006666222

  KEY    FEATURE
  ---   -------
   2     CXR  CTALL N  RLS
PILOT DN:    6006666221
GROUP OPTIONS:
RCVD
--------------------------------------------------------------------------------
```

Table 2-3. MSL-100 Service Order Configurations (continued)

```
--------------------------------------------------------------------------------
LEN:    HOST  00 1 00 18
TYPE: MEMBER OF DNH HUNT GROUP
SNPA: 600
HUNT GROUP: 8     HUNT MEMBER: 2
DIRECTORY NUMBER:    6666223
LINE CLASS CODE:  M5316 SET
CUSTGRP:         MFS6  SUBGRP: 0  NCOS: 2  RING: Y
CARDCODE: 6X21AC   GND: N  PADGRP: NPDGP  BNV: NL MNO: Y
PM NODE NUMBER    :   50
PM TERMINAL NUMBER :   19
OPTIONS:
AVT PREMTBL
CXR CTALL N RLS

  KEY    DN
  ---    --
   1     DN       6006666223

  KEY    FEATURE
  ---    -------
   2     CXR   CTALL N  RLS
PILOT DN:    6006666221
GROUP OPTIONS:
RCVD
--------------------------------------------------------------------------------


--------------------------------------------------------------------------------
LEN:    HOST  00 1 00 19
TYPE: MEMBER OF DNH HUNT GROUP
SNPA: 600
HUNT GROUP: 8     HUNT MEMBER: 3
DIRECTORY NUMBER:    6666224
LINE CLASS CODE:  M5316 SET
CUSTGRP:         MFS6  SUBGRP: 0  NCOS: 2  RING: Y
CARDCODE: 6X21AC   GND: N  PADGRP: NPDGP  BNV: NL MNO: Y
PM NODE NUMBER    :   50
PM TERMINAL NUMBER :   20
OPTIONS:
AVT PREMTBL
CXR CTALL N RLS

  KEY    DN
  ---    --
   1     DN       6006666224

  KEY    FEATURE
  ---    -------
   2     CXR   CTALL N  RLS
PILOT DN:    6006666221
GROUP OPTIONS:
RCVD
--------------------------------------------------------------------------------
```

Table 2-3. MSL-100 Service Order Configurations (continued)

```
--------------------------------------------------------------------------
LEN:    HOST  00 1 00 20
TYPE: MEMBER OF DNH HUNT GROUP
SNPA: 600
HUNT GROUP: 8     HUNT MEMBER: 4
DIRECTORY NUMBER:    6666225
LINE CLASS CODE:  M5316 SET
CUSTGRP:        MFS6  SUBGRP: 0  NCOS: 2  RING: Y
CARDCODE: 6X21AC   GND: N  PADGRP: NPDGP  BNV: NL MNO: Y
PM NODE NUMBER    :   50
PM TERMINAL NUMBER :   21
OPTIONS:
AVT PREMTBL
CXR CTALL N RLS

  KEY    DN
  ---    --
   1     DN      6006666225

  KEY    FEATURE
  ---    -------
   2     CXR   CTALL N  RLS
PILOT DN:    6006666221
GROUP OPTIONS:
RCVD
--------------------------------------------------------------------------


--------------------------------------------------------------------------
LEN:    HOST  00 1 00 21
TYPE: MEMBER OF DNH HUNT GROUP
SNPA: 600
HUNT GROUP: 8     HUNT MEMBER: 5
DIRECTORY NUMBER:    6666226
LINE CLASS CODE:  M5316 SET
CUSTGRP:        MFS6  SUBGRP: 0  NCOS: 2  RING: Y
CARDCODE: 6X21AC   GND: N  PADGRP: NPDGP  BNV: NL MNO: Y
PM NODE NUMBER    :   50
PM TERMINAL NUMBER :   22
OPTIONS:
AVT PREMTBL
CXR CTALL N RLS

  KEY    DN
  ---    --
   1     DN      6006666226

  KEY    FEATURE
  ---    -------
   2     CXR   CTALL N  RLS
PILOT DN:    6006666221
GROUP OPTIONS:
RCVD
--------------------------------------------------------------------------
```

Table 2-3. MSL-100 Service Order Configurations (continued)

```
----------------------------------------------------------------------------
LEN:    HOST  00 1 00 22
TYPE: MEMBER OF DNH HUNT GROUP
SNPA: 600
HUNT GROUP: 8     HUNT MEMBER: 6
DIRECTORY NUMBER:   6666227
LINE CLASS CODE: M5316 SET
CUSTGRP:        MFS6 SUBGRP: 0 NCOS: 2  RING: Y
CARDCODE: 6X21AC   GND: N PADGRP: NPDGP BNV: NL MNO: Y
PM NODE NUMBER    :   50
PM TERMINAL NUMBER :   23
OPTIONS:
AVT PREMTBL
CXR CTALL N RLS

  KEY    DN
  ---    --
   1    DN      6006666227
   3    MDN       6006676231  SCA      PRIM:N  RING :ALWAYS  NCOS:2

  KEY    FEATURE
  ---    -------
   2     CXR   CTALL N  RLS
PILOT DN:    6006666221
GROUP OPTIONS:
RCVD
----------------------------------------------------------------------------


----------------------------------------------------------------------------
LEN:    HOST  00 1 00 23
TYPE: MEMBER OF DNH HUNT GROUP
SNPA: 600
HUNT GROUP: 8     HUNT MEMBER: 7
DIRECTORY NUMBER:   6666228
LINE CLASS CODE: M5316 SET
CUSTGRP:        MFS6 SUBGRP: 0 NCOS: 2  RING: Y
CARDCODE: 6X21AC   GND: N PADGRP: NPDGP BNV: NL MNO: Y
PM NODE NUMBER    :   50
PM TERMINAL NUMBER :   24
OPTIONS:
AVT PREMTBL
CXR CTALL N RLS

  KEY    DN
  ---    --
   1    DN      6006666228
   3    MDN       6006676229  SCA      PRIM:N  RING :ALWAYS  NCOS:2

  KEY    FEATURE
  ---    -------
   2     CXR   CTALL N  RLS
PILOT DN:    6006666221
GROUP OPTIONS:
RCVD
----------------------------------------------------------------------------
```

Table 2-3. MSL-100 Service Order Configurations (continued)

```
-------------------------------------------------------------------------
LEN:    HOST  00 1 00 24
TYPE: PILOT OF DNH HUNT GROUP
SNPA: 600
HUNT GROUP: 9     HUNT MEMBER: 0
DIRECTORY NUMBER:    6666230
LINE CLASS CODE:  M5316 SET
CUSTGRP:          MFS6 SUBGRP: 0 NCOS: 2  RING: Y
CARDCODE: 6X21AC    GND: N  PADGRP: NPDGP  BNV: NL MNO: Y
PM NODE NUMBER    :   50
PM TERMINAL NUMBER :   25
OPTIONS:
AVT PREMTBL
CXR CTALL N RLS

   KEY     DN
   ---    --
    1    DN      6006666230
    3    MDN       6006676229  SCA      PRIM:Y  RING :ALWAYS  NCOS:2

   KEY    FEATURE
   ---   -------
    2     CXR   CTALL N  RLS
GROUP OPTIONS:
RCVD
MEMBER INFO:
  2    6006666232
-------------------------------------------------------------------------


-------------------------------------------------------------------------
LEN:    HOST  00 1 00 25
TYPE: MEMBER OF DNH HUNT GROUP
SNPA: 600
HUNT GROUP: 9     HUNT MEMBER: 1
DIRECTORY NUMBER:    6666232
LINE CLASS CODE:  M5316 SET
CUSTGRP:          MFS6 SUBGRP: 0 NCOS: 2  RING: Y
CARDCODE: 6X21AD    GND: N  PADGRP: NPDGP  BNV: NL MNO: Y
PM NODE NUMBER    :   50
PM TERMINAL NUMBER :   26
OPTIONS:
AVT PREMTBL
CXR CTALL N RLS

   KEY     DN
   ---    --
    1    DN      6006666232
    3    MDN       6006676231  SCA      PRIM:Y  RING :ALWAYS  NCOS:2

   KEY    FEATURE
   ---   -------
    2     CXR   CTALL N  RLS
PILOT DN:    6006666230
GROUP OPTIONS:
RCVD
-------------------------------------------------------------------------
```

Table 2-4. SUT ACD Key Assignments

25 Pair Cable with 50 Pin Amphenol Connector										
	Circular Line Hunt Group								Soft Phone	Hard Phone
LEN/Cable Pair	**0-1-0-16 Pair 1**	**0-1-0-17 Pair 2**	**0-1-0-18 Pair 3**	**0-1-0-19 Pair 4**	**0-1-0-20 Pair 5**	**0-1-0-21 Pair 6**	**0-1-0-22 Pair 7**	**0-1-0-23 Pair 8**	**0-1-0-24 Pair 11**	**0-1-0-25 Pair 12**
Key1	**666-6021 Pilot Hunt Group DN**	**666-6022 Pilot Hunt Group DN#2**	**666-6023 Pilot Hunt Group DN#2**	**666-6024 Pilot Hunt Group DN#2**	**666-6025 Pilot Hunt Group DN#2**	**666-6026 Pilot Hunt Group DN#2**	**666-6027 Pilot Hunt Group DN#2**	**666-6028 Pilot Hunt Group DN#2**	**666-6230**	**666-6232**
Key2	**Call Transfer with Release**	**Call Transfer with Release**	**Call Transfer with Release**	**Call Transfer with Release**	**Call Transfer with Release**	**Call Transfer with Release**	**Call Transfer with Release**	**Call Transfer with Release**	**Call Transfer with Release**	**Call Transfer with Release**
Key3							**SCA MADN 667-6231**	**SCA MADN 667-6229**	**667-6229 MADN**	**667-6231 MADN**
Key4										
Key5										
Key6										
Key7										

LEGEND:
ACD - Automatic Call Distribution
DN   - Directory Number
LEN - Line Equipment Number
MADN   - Multiple Appearance Directory Number
SCA - Secondary Call Appearance
SUT - System Under Test

10. TEST LIMITATIONS. None.

11. TEST RESULTS

    a. Discussion. The SUT was tested by placing multiple ROUTINE through FLASH OVERRIDE precedence calls from analog, Integrated Services Digital Network, and Digital Proprietary telephones using the test configuration depicted in figure 2-2. The SUT proprietary interfaces support Multi-Level Precedence and Preemption (MLPP). Incoming and outgoing ROUTINE through FLASH OVERRIDE incoming calls were successfully completed. The SUT met MLPP interoperability requirements as set forth in the GSCR section 3. All preempted calls received the proper preemption notification tone, and were released and returned to an idle state ready for the subsequent caller.

    b. Lessons Learned. The SUT requires the assignment of the Multiple Appearance Directory Number (MADN) feature in the MSL-100 as depicted in tables 2-4 and 2-5 to allow the SUT to monitor which agents are active or idle, transferring subsequent incoming calls to idle agents. The number of agents assigned in the SUT must always equal the number of proprietary lines directly connected from the MSL-100 switch. Since MADN assignments in the MSL-100 do not allow MLPP, the MADN number assignment in the MSL-100 must be a non-direct-in-dial number that cannot be directly accessed by the DSN. Therefore, the only incoming calls placed to the MADN appearances on the ACD agent's phones are transferred calls automatically accomplished by the SUT. Outgoing calls from the ACD agent MADN lines to the DSN are allowed.

    c.   Test Summary. The SUT meets all the interface and functional interoperability certification requirements for an ACD as set forth in the GSCR and is certified for joint use within the DSN specifically with the Nortel Networks MSL-100 and CS2100. The SUT is interoperable with the following MSL-100 proprietary MBS interfaces: M5008, M5216, and M5316. The SUT soft phone used by the ACD agents that emulates the Nortel Networks M5008, M5216 and M5316 MBS was also tested and is covered under this certification.

12. TEST AND ANALYSIS REPORT. No detailed test report was developed in accordance with the Program Manager's request. JITC distributes interoperability information via the JITC Electronic Report Distribution (ERD) system, which uses Unclassified-But-Sensitive Internet Protocol Router Network (NIPRNet) e-mail. More comprehensive interoperability status information is available via the JITC System Tracking Program (STP). The STP is accessible by .mil/gov users on the NIPRNet at https://stp.fhu.disa.mil. Test reports, lessons learned, and related testing documents and references are on the JITC Joint Interoperability Tool (JIT) at http://jit.fhu.disa.mil (NIPRNet), or http://199.208.204.125 (SIPRNet). Information related to DSN testing is on the Telecom Switched Services Interoperability (TSSI) website at http://jitc.fhu.disa.mil/tssi.